

Trend Study 1-16-01

Study site name: Nut Pine Hills.

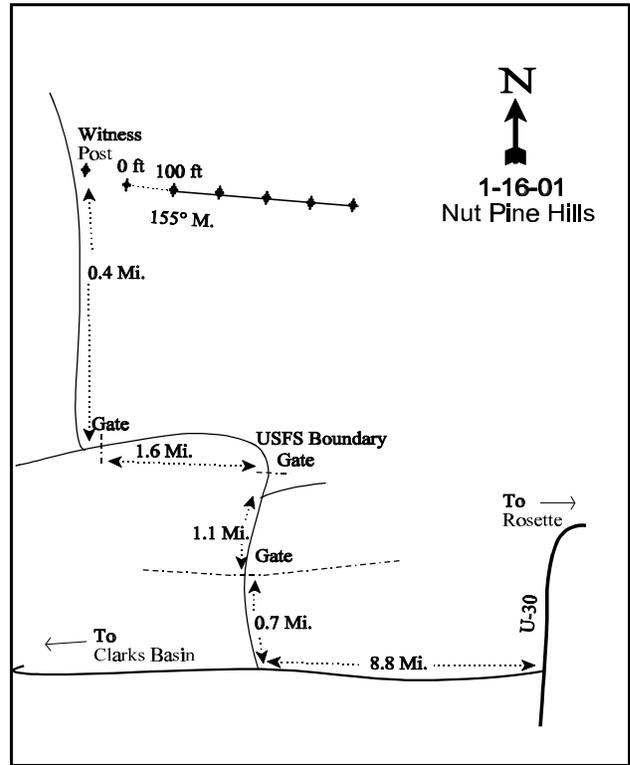
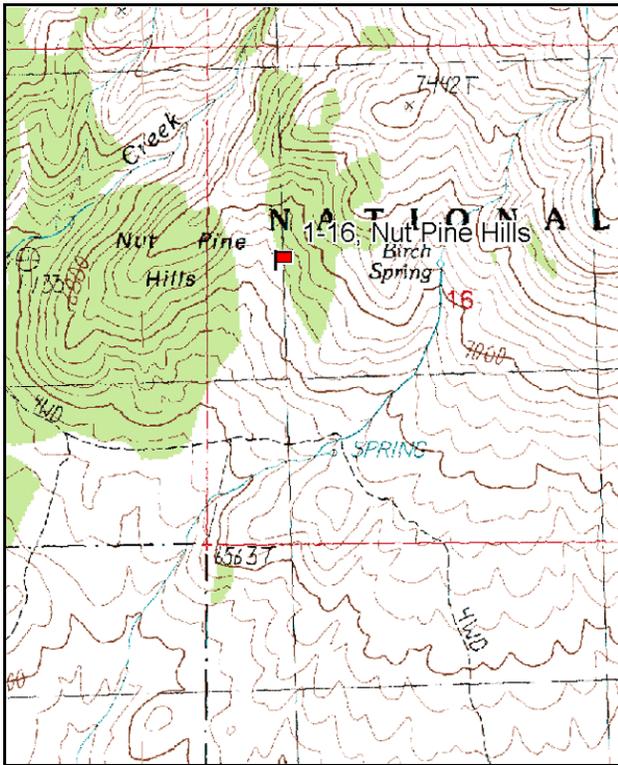
Vegetation type: Mountain Brush.

Compass bearing: frequency baseline 155 degrees magnetic.

Frequency belt placement: line 1 (11ft), line 2 (34ft), line 3 (59ft), line 4 (71ft), line 5 (95ft).

LOCATION DESCRIPTION

From U-30, travel up the road to Clark's Basin for 8.8 miles. Turn right and travel 0.7 miles to a gate. Continue 1.1 miles to a gate marking the forest boundary. Continue 1.6 miles to another gate. Just after the gate turn right and proceed 0.4 miles to a witness post. The zero foot stake is just east of the witness post.



Map Name: Dennis Hill

Diagrammatic Sketch

Township 13N, Range 15W, Section 16

UTM 4636341 N, 285977 E

DISCUSSION

Trend Study No. 1-16

The Nut Pine Hills is a new trend study set up to monitor important deer winter range on the south slope of the Raft River mountains. The area supports a mixed mountain brush community type with scattered pinyon and juniper trees. The site is on U.S. Forest Service land and is part of the Sawtooth National Forest. It has a moderate slope of 20% to 23% with a southwest aspect and an elevation of approximately 7,000 feet. Deer also use this area in the spring. Deer were flushed from the site when it was being established. Pellet group frequency of deer was moderately high in 1996. Cattle also use this area as part of the large Yost allotment. This allotment has been combined with the Raft River allotment. Combined, these allotments are grazed by 1,418 cattle in the spring and fall. The pellet-group transect read on the site in 2001 estimated 38 deer days use/acre (94 deer days use/ha) 4 cow days use/acre (9 cow days use/ha). Most of the deer pellet groups were fresh indicating mostly spring and early summer use.

The soil is moderately deep with a sandy clay loam texture. The soil reaction is moderately alkaline (8.1 pH) with a limited amount of phosphorus in the soil (8.5 ppm) where values less than 10 ppm can limit normal plant growth and development. Effective rooting depth (see methods) was estimated at 19 inches, but depth must be more restricted in some areas where black sagebrush and stemless goldenweed occur. Vegetative and litter cover are abundant which adequately protect the soil from serious erosion. Pavement is concentrated on the surface in isolated open interspaces. Rocks are common throughout the profile.

The site is dominated by browse species. Fourteen shrub species combine to produce 37% shrub cover in 1996 and 51% cover in 2001. Key species include serviceberry, mountain big sagebrush, and antelope bitterbrush. Mature serviceberry average about 3 feet in height. Density is currently ('01) about 660 plants/acre with 24% displaying heavy use. Vigor is good on all plants and percent decadency is moderately low at 18%. Mountain big sagebrush presently has an estimated density of 1,480 plants/acre with almost 90% classified as mature. Utilization was heavy on a few individual plants in 1996 but mostly light overall. The population appears stable with sufficient seedlings and young combined with a low percent decadence (7%). Antelope bitterbrush is abundant and accounted for 32% of the shrub cover in 2001. Average mature bitterbrush plants measure only 2 feet in height with a 4 foot crown. Utilization of these shrubs varies from light to heavy with 35% displaying heavy use in 2001. Yet, vigor is good and percent decadency is low at only 6% of the population.

Snowberry is currently the most abundant shrub on the site contributing 32% of the shrub cover in 2001, with an estimated 3,980 plants/acre. Utilization of these less preferred shrubs is light. Other shrubs found on the site include small numbers of black sagebrush, threadleaf rubber rabbitbrush, stickyleaf low rabbitbrush, slenderbush eriogonum, broom snakeweed, chokecherry, wax currant, woods rose and gray horsebrush. Most of these shrubs were unutilized. A few tree size and high-lined curleaf mahogany occur on the site.

The herbaceous understory is diverse and presently ('01) produces a total of 20% cover or 29% of the total vegetative cover. Grasses are diverse with 8 perennial species inventoried. The more abundant species include: thickspike wheatgrass, bluebunch wheatgrass, and Sandberg bluegrass. Annual cheatgrass brome is present but only in very small numbers, producing <1% of the grass cover. Forbs are also abundant with 32 perennial and 7 annual species counted. Several useful species are present, including: paintbrush, sulfur eriogonum, lambstongue groundsel, and lobeleaf groundsel. These and other forbs provide useful spring forage for big game.

1996 APPARENT TREND ASSESSMENT

The soil trend appears stable due to the abundant protective vegetation and litter cover. The browse component dominates the vegetational aspects of the site and provides useful forage for wintering big game. The three key species, serviceberry, mountain big sagebrush, and antelope bitterbrush appear to have stable trends with good reproductive potentials, low decadency and good vigor. Utilization of bitterbrush is heavy but not to the point that it reduces vigor of the shrubs. The herbaceous understory is very diverse with some useful species present. Increases in the shrub component could eventually cause a decline in the understory.

2001 TREND ASSESSMENT

The soil trend appears stable due to the abundant protective vegetation and litter cover. In fact, the ratio of bare soil to protective ground cover has improved from the last reading. The browse component continues to dominate the vegetational aspects of the site and provides useful forage for wintering big game. The three key species, serviceberry, mountain big sagebrush, and antelope bitterbrush appear to have stable trends with good reproductive potentials, relatively low decadency, and good vigor. Utilization of bitterbrush is moderate to heavy but not to the point that it reduces vigor. The herbaceous understory is very diverse with some useful species present. The sum of nested frequency for perennial grasses has increased with a corresponding decrease for perennial forbs, offsetting each other. Overall, trend for the herbaceous understory is stable. However, increases in the shrub component could eventually cause a decline in the understory.

TREND ASSESSMENT

soil - stable (3)

browse - stable (3)

herbaceous understory - stable (3)

HERBACEOUS TRENDS --

Herd unit 01 , Study no: 16

T y p e	Species	Nested Frequency		Quadrat Frequency		Average Cover %	
		'96	'01	'96	'01	'96	'01
G	Agropyron dasystachyum	140	186	48	56	.88	3.29
G	Agropyron spicatum	141	123	51	37	2.15	5.65
G	Bromus tectorum (a)	47	*11	17	4	.16	.19
G	Elymus cinereus	10	*-	3	-	.04	.15
G	Koeleria cristata	22	*10	11	5	.37	.39
G	Oryzopsis hymenoides	1	6	1	2	.03	.18
G	Poa fendleriana	97	*27	36	7	1.71	.76
G	Poa pratensis	-	*43	-	13	-	.81
G	Poa secunda	21	*123	8	48	.40	3.27
Total for Annual Grasses		47	11	17	4	0.15	0.18
Total for Perennial Grasses		432	518	158	168	5.61	14.51
Total for Grasses		479	529	175	172	5.76	14.70

Type	Species	Nested Frequency		Quadrat Frequency		Average Cover %	
		'96	'01	'96	'01	'96	'01
F	<i>Achillea millefolium</i>	-	6	-	3	-	.06
F	<i>Agoseris glauca</i>	68	*5	25	4	.15	.02
F	<i>Arabis</i> spp.	5	-	3	-	.01	-
F	<i>Astragalus beckwithii</i>	4	3	1	2	.00	.06
F	<i>Astragalus newberryi</i>	6	-	3	-	.01	-
F	<i>Aster</i> spp.	17	*38	5	14	.10	.44
F	<i>Astragalus utahensis</i>	3	-	1	-	.03	-
F	<i>Castilleja linariaefolia</i>	4	-	2	-	.03	-
F	<i>Calochortus nuttallii</i>	3	-	1	-	.00	-
F	<i>Chaenactis douglasii</i>	22	*8	12	3	.06	.01
F	<i>Cirsium</i> spp.	8	10	4	4	.06	.22
F	<i>Collomia linearis</i> (a)	16	22	6	7	.03	.03
F	<i>Comandra pallida</i>	105	*57	49	26	.49	.61
F	<i>Collinsia parviflora</i> (a)	131	*59	42	22	.43	.38
F	<i>Crepis acuminata</i>	31	17	14	9	.12	.53
F	<i>Cryptantha</i> spp.	22	*5	11	2	.22	.01
F	<i>Delphinium nuttallianum</i>	9	2	3	1	.04	.00
F	<i>Descurainia pinnata</i> (a)	16	-	5	-	.05	-
F	<i>Erysimum asperum</i>	3	-	2	-	.01	-
F	<i>Eriogonum cernuum</i> (a)	10	-	4	-	.02	-
F	<i>Erigeron pumilus</i>	1	-	1	-	.00	-
F	<i>Eriogonum umbellatum</i>	46	27	21	13	1.25	.87
F	<i>Gilia</i> spp. (a)	21	*-	13	-	.09	-
F	<i>Haplopappus acaulis</i>	16	12	7	6	.37	.18
F	<i>Hackelia patens</i>	69	*15	29	10	.91	.17
F	<i>Lesquerella</i> spp.	5	-	3	-	.01	-
F	<i>Lithospermum ruderales</i>	25	20	12	8	.41	.69
F	<i>Lomatium</i> spp.	21	16	8	8	.41	.40
F	<i>Microsteris gracilis</i> (a)	-	26	-	10	-	.05
F	<i>Phlox austromontana</i>	44	33	20	14	.30	.61
F	<i>Phlox longifolia</i>	86	*31	33	13	.18	.07
F	<i>Polygonum douglasii</i> (a)	7	2	3	1	.01	.00
F	<i>Ranunculus testiculatus</i> (a)	-	1	-	1	-	.00
F	<i>Senecio integerrimus</i>	20	8	6	4	.40	.36
F	<i>Senecio multilobatus</i>	59	*19	27	7	.29	.22
F	<i>Taraxacum officinale</i>	5	4	1	2	.00	.03

T y p e	Species	Nested Frequency		Quadrat Frequency		Average Cover %	
		'96	'01	'96	'01	'96	'01
F	Unknown forb-annual (a)	8	*-	5	-	.02	-
F	Viola spp.	21	*6	10	4	.07	.02
F	Zigadenus paniculatus	-	2	-	1	-	.03
Total for Annual Forbs		209	110	78	41	0.65	0.47
Total for Perennial Forbs		728	344	314	158	6.00	5.67
Total for Forbs		937	454	392	199	6.65	6.14

* Indicates significant difference at alpha = 0.10 (annuals excluded)

BROWSE TRENDS --

Herd unit 01 , Study no: 16

T y p e	Species	Strip Frequency		Average Cover %	
		'96	'01	'96	'01
B	Amelanchier utahensis	32	28	3.92	7.59
B	Artemisia nova	12	6	.01	.03
B	Artemisia tridentata vaseyana	41	45	4.09	6.84
B	Chrysothamnus nauseosus consimilis	5	3	.00	.38
B	Chrysothamnus viscidiflorus lanceolatus	45	36	1.56	1.24
B	Eriogonum microthecum	23	15	.32	.24
B	Gutierrezia sarothrae	11	4	.12	.15
B	Juniperus osteosperma	4	2	.71	.71
B	Mahonia repens	4	4	.04	.04
B	Opuntia spp.	3	1	.03	-
B	Prunus virginiana	2	0	-	-
B	Purshia tridentata	48	46	11.98	16.20
B	Rosa woodsii	2	3	-	.30
B	Symphoricarpos oreophilus	72	69	13.26	16.46
B	Tetradymia canescens	34	33	.67	.60
Total for Browse		338	295	36.76	50.82

CANOPY COVER --

Herd unit 01 , Study no: 16

Point-Quarter Data

Species	Percent Cover		Trees per Acre		Average diameter (in)	
	'96	'01	'96	'01	'96	'01
Juniperus osteosperma	1	3	-	49	-	6.3
Pinus monophylla	-	.40	-	78	-	8.5

BASIC COVER --

Herd unit 01 , Study no: 16

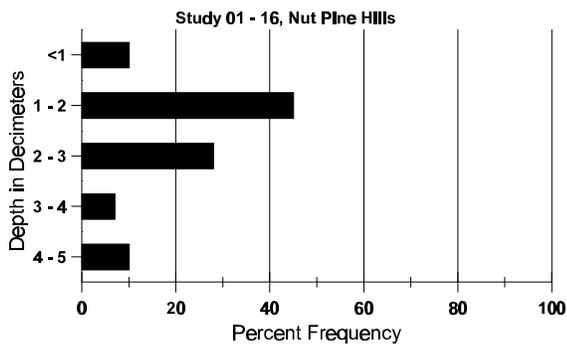
Cover Type	Nested Frequency		Average Cover %	
	'96	'01	'96	'01
Vegetation	420	422	43.29	62.09
Rock	206	84	2.98	1.24
Pavement	249	205	3.84	6.13
Litter	487	461	45.58	47.65
Cryptogams	19	2	.13	.03
Bare Ground	276	194	12.81	13.35

SOIL ANALYSIS DATA --

Herd Unit 01, Study no: 16, Nut Pine Hills

Effective rooting depth (in)	Temp °F (depth)	PH	%sand	%silt	%clay	%OM	PPM P	PPM K	dS/m
19.1	51.4 (17.6)	8.1	50.9	25.1	24.0	2.1	8.5	544.0	1.1

Stoniness Index



PELLET GROUP FREQUENCY --

Herd unit 01 , Study no: 16

Type	Quadrat Frequency		Pellet Transect	
			Pellet Groups per Acre	Days Use per Acre (ha)
	'96	'01	'01	'01
Rabbit	2	3	365	N/A
Deer	22	9	496	38 (94)
Cattle	6	2	44	4 (9)

BROWSE CHARACTERISTICS --

Herd unit 01 , Study no: 16

A G R E	Y	Form Class (No. of Plants)									Vigor Class				Plants Per Acre	Average (inches) Ht. Cr.		Total
		1	2	3	4	5	6	7	8	9	1	2	3	4				
Amelanchier utahensis																		
S	96	-	-	-	-	-	-	-	-	-	-	-	-	-	0			0
	01	1	-	-	-	-	-	-	-	-	-	-	-	-	20			1
Y	96	6	-	-	4	-	1	-	-	-	-	-	-	11	-	-	-	11
	01	2	1	-	3	-	-	-	-	-	-	-	-	6	-	-	-	6
M	96	5	7	4	4	7	1	-	-	-	-	-	-	28	-	-	-	28
	01	5	1	2	2	-	4	6	1	-	-	-	-	21	-	-	-	21
D	96	-	2	-	1	1	-	-	-	-	-	-	-	4	-	-	-	4
	01	1	2	-	1	-	2	-	-	-	-	-	-	3	1	-	2	6
X	96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4
	01	-	-	-	-	-	-	-	-	-	-	-	-	-	140	-	-	7
% Plants Showing		<u>Moderate Use</u>		<u>Heavy Use</u>		<u>Poor Vigor</u>				<u>%Change</u>								
'96		40%		14%		00%				-23%								
'01		12%		24%		06%												
Total Plants/Acre (excluding Dead & Seedlings)												'96	860	Dec:	9%			
												'01	660		18%			
Artemisia nova																		
Y	96	1	2	-	-	-	-	-	-	-	-	-	-	3	-	-	-	3
	01	1	-	-	1	-	-	-	-	-	-	-	-	2	-	-	-	2
M	96	-	2	3	-	-	1	-	-	-	-	-	-	6	-	-	-	6
	01	8	-	-	-	-	-	-	-	-	-	-	-	8	-	-	-	8
D	96	1	2	2	2	-	-	-	-	-	-	-	-	5	-	-	2	7
	01	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1
X	96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6
	01	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	0
% Plants Showing		<u>Moderate Use</u>		<u>Heavy Use</u>		<u>Poor Vigor</u>				<u>%Change</u>								
'96		38%		38%		13%				-31%								
'01		00%		00%		00%												
Total Plants/Acre (excluding Dead & Seedlings)												'96	320	Dec:	44%			
												'01	220		9%			

A G R E	Y R	Form Class (No. of Plants)									Vigor Class				Plants Per Acre	Average (inches) Ht. Cr.		Total
		1	2	3	4	5	6	7	8	9	1	2	3	4				
<i>Artemisia tridentata vaseyana</i>																		
S	96	1	-	-	-	-	-	-	-	-	1	-	-	-	20		1	
	01	1	-	-	-	-	-	-	-	-	1	-	-	-	20		1	
Y	96	3	-	-	3	-	1	-	-	-	7	-	-	-	140		7	
	01	4	-	-	-	-	-	-	-	-	4	-	-	-	80		4	
M	96	21	11	-	15	-	1	-	-	-	47	1	-	-	960	19	29	48
	01	44	6	-	13	-	-	2	-	-	58	7	-	-	1300	24	29	65
D	96	2	-	-	-	-	-	-	-	-	2	-	-	-	40		2	
	01	4	-	-	1	-	-	-	-	-	4	-	1	-	100		5	
X	96	-	-	-	-	-	-	-	-	-	-	-	-	-	280		14	
	01	-	-	-	-	-	-	-	-	-	-	-	-	-	140		7	
% Plants Showing		<u>Moderate Use</u>			<u>Heavy Use</u>			<u>Poor Vigor</u>			<u>%Change</u>							
'96		19%			04%			00%			+23%							
'01		08%			00%			01%										
Total Plants/Acre (excluding Dead & Seedlings)											'96	1140	Dec:	4%				
											'01	1480		7%				
<i>Chrysothamnus nauseosus consimilis</i>																		
Y	96	1	-	-	-	-	-	-	-	-	1	-	-	-	20		1	
	01	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0	
M	96	2	-	-	-	-	-	-	-	-	2	-	-	-	40	26	33	2
	01	-	-	-	-	-	-	-	-	-	-	-	-	-	0	29	49	0
D	96	3	-	-	-	-	-	-	-	-	1	-	-	2	60		3	
	01	1	-	-	2	-	-	-	-	-	1	-	-	2	60		3	
% Plants Showing		<u>Moderate Use</u>			<u>Heavy Use</u>			<u>Poor Vigor</u>			<u>%Change</u>							
'96		00%			00%			33%			-50%							
'01		00%			00%			67%										
Total Plants/Acre (excluding Dead & Seedlings)											'96	120	Dec:	50%				
											'01	60		100%				

A Y G R E	Form Class (No. of Plants)	Vigor Class				Plants Per Acre	Average (inches) Ht. Cr.		Total							
		1	2	3	4		1	2								
Chrysothamnus viscidiflorus lanceolatus																
S	96	3	-	-	-	-	1	-	-	4	-	-	-	80		4
	01	-	-	-	-	-	-	-	-	-	-	-	-	0		0
Y	96	10	-	-	2	-	-	1	-	-	-	-	13	-	-	13
	01	1	-	-	-	-	-	-	-	-	-	-	1	-	-	1
M	96	42	2	-	14	-	-	-	-	-	-	-	58	-	-	58
	01	43	-	-	11	-	-	1	-	-	-	-	55	-	-	55
D	96	3	-	-	-	-	-	-	-	-	-	-	2	-	-	3
	01	2	-	-	-	-	-	-	-	-	-	-	-	-	2	2
% Plants Showing		<u>Moderate Use</u>			<u>Heavy Use</u>			<u>Poor Vigor</u>			<u>%Change</u>					
'96		03%			00%			01%			-22%					
'01		00%			00%			03%								
Total Plants/Acre (excluding Dead & Seedlings)										'96	1480	Dec:	4%			
										'01	1160		3%			
Eriogonum microthecum																
S	96	1	-	-	-	-	-	-	-	-	-	-	1	-	-	1
	01	-	-	-	-	-	-	-	-	-	-	-	-	0		0
Y	96	5	-	-	-	-	-	-	-	-	-	-	5	-	-	5
	01	3	-	-	-	-	-	-	-	-	-	-	3	-	-	3
M	96	28	-	-	-	-	-	-	-	-	-	-	28	-	-	28
	01	17	-	-	-	-	-	-	-	-	-	-	17	-	-	17
D	96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
	01	2	-	-	-	-	-	-	-	-	-	-	2	-	-	2
% Plants Showing		<u>Moderate Use</u>			<u>Heavy Use</u>			<u>Poor Vigor</u>			<u>%Change</u>					
'96		00%			00%			00%			-33%					
'01		00%			00%			00%								
Total Plants/Acre (excluding Dead & Seedlings)										'96	660	Dec:	0%			
										'01	440		9%			

A G R E	Y R	Form Class (No. of Plants)									Vigor Class				Plants Per Acre	Average (inches) Ht. Cr.		Total
		1	2	3	4	5	6	7	8	9	1	2	3	4				
<i>Gutierrezia sarothrae</i>																		
S	96	9	-	-	-	-	-	-	-	-	9	-	-	-	180		9	
	01	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0	
Y	96	20	-	-	-	-	-	-	-	-	20	-	-	-	400		20	
	01	8	-	-	-	-	-	-	-	-	8	-	-	-	160		8	
M	96	38	-	-	-	-	-	-	-	-	38	-	-	-	760	4	4	38
	01	10	-	-	1	-	-	-	-	-	11	-	-	-	220	3	5	11
D	96	1	-	-	-	-	-	-	-	-	1	-	-	-	20		1	
	01	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0	
X	96	-	-	-	-	-	-	-	-	-	-	-	-	-	20		1	
	01	-	-	-	-	-	-	-	-	-	-	-	-	-	60		3	
% Plants Showing		<u>Moderate Use</u>			<u>Heavy Use</u>			<u>Poor Vigor</u>			<u>%Change</u>							
'96		00%			00%			00%			-68%							
'01		00%			00%			00%										
Total Plants/Acre (excluding Dead & Seedlings)											'96	1180	Dec:	2%				
											'01	380		0%				
<i>Juniperus osteosperma</i>																		
S	96	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0	
	01	1	-	-	-	-	-	-	-	-	1	-	-	-	20		1	
Y	96	4	-	-	-	-	-	-	-	-	4	-	-	-	80		4	
	01	1	-	-	-	-	-	-	-	-	1	-	-	-	20		1	
M	96	2	-	-	-	-	-	1	-	-	3	-	-	-	60	-	-	3
	01	-	-	-	-	-	1	-	-	-	1	-	-	-	20	-	-	1
% Plants Showing		<u>Moderate Use</u>			<u>Heavy Use</u>			<u>Poor Vigor</u>			<u>%Change</u>							
'96		00%			00%			00%			-71%							
'01		00%			00%			00%										
Total Plants/Acre (excluding Dead & Seedlings)											'96	140	Dec:	-				
											'01	40		-				
<i>Mahonia repens</i>																		
Y	96	18	-	-	-	-	-	-	-	-	18	-	-	-	360		18	
	01	4	-	-	-	-	-	-	-	-	4	-	-	-	80		4	
M	96	-	-	-	-	-	-	-	-	-	-	-	-	-	0	3	3	0
	01	5	-	-	-	-	-	-	-	-	5	-	-	-	100	2	2	5
% Plants Showing		<u>Moderate Use</u>			<u>Heavy Use</u>			<u>Poor Vigor</u>			<u>%Change</u>							
'96		00%			00%			00%			-50%							
'01		00%			00%			00%										
Total Plants/Acre (excluding Dead & Seedlings)											'96	360	Dec:	-				
											'01	180		-				

A G R E	Y R	Form Class (No. of Plants)									Vigor Class				Plants Per Acre	Average (inches) Ht. Cr.		Total
		1	2	3	4	5	6	7	8	9	1	2	3	4				
Opuntia spp.																		
M	96	4	-	-	-	-	-	-	-	-	4	-	-	-	80	5	16	4
	01	-	-	-	1	-	-	-	-	-	1	-	-	-	20	4	10	1
D	96	1	-	-	-	-	-	-	-	1	-	-	-	20			1	
	01	-	-	-	-	-	-	-	-	-	-	-	-	0			0	
% Plants Showing		<u>Moderate Use</u>			<u>Heavy Use</u>			<u>Poor Vigor</u>			<u>%Change</u>							
'96		00%			00%			00%			-80%							
'01		00%			00%			00%										
Total Plants/Acre (excluding Dead & Seedlings)											'96	100	Dec:	20%				
											'01	20		0%				
Prunus virginiana																		
Y	96	1	-	-	-	-	-	1	-	-	2	-	-	-	40			2
	01	-	-	-	-	-	-	-	-	-	-	-	-	-	0			0
% Plants Showing		<u>Moderate Use</u>			<u>Heavy Use</u>			<u>Poor Vigor</u>			<u>%Change</u>							
'96		00%			00%			00%										
'01		00%			00%			00%										
Total Plants/Acre (excluding Dead & Seedlings)											'96	40	Dec:	-				
											'01	0		-				
Purshia tridentata																		
S	96	5	-	-	-	-	-	-	-	-	5	-	-	-	100			5
	01	2	-	-	-	-	-	-	-	-	2	-	-	-	40			2
Y	96	1	2	1	1	-	1	-	-	-	6	-	-	-	120			6
	01	4	1	-	-	-	-	-	-	-	5	-	-	-	100			5
M	96	-	11	35	1	15	4	-	-	-	66	-	-	-	1320	23	49	66
	01	24	7	19	-	7	3	2	-	1	63	-	-	-	1260	25	48	63
D	96	1	-	-	-	1	-	-	-	-	1	-	-	1	40			2
	01	1	-	2	1	-	-	-	-	-	1	-	1	2	80			4
X	96	-	-	-	-	-	-	-	-	-	-	-	-	-	60			3
	01	-	-	-	-	-	-	-	-	-	-	-	-	-	100			5
% Plants Showing		<u>Moderate Use</u>			<u>Heavy Use</u>			<u>Poor Vigor</u>			<u>%Change</u>							
'96		39%			55%			01%			- 3%							
'01		21%			35%			04%										
Total Plants/Acre (excluding Dead & Seedlings)											'96	1480	Dec:	3%				
											'01	1440		6%				

A G E	Y R	Form Class (No. of Plants)									Vigor Class				Plants Per Acre	Average (inches) Ht. Cr.		Total
		1	2	3	4	5	6	7	8	9	1	2	3	4				
Ribes cereum cereum																		
M	96	-	-	-	-	-	-	-	-	-	-	-	-	-	0	4	62	0
	01	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-	-	0
% Plants Showing		<u>Moderate Use</u>			<u>Heavy Use</u>			<u>Poor Vigor</u>			<u>%Change</u>							
'96		00%			00%			00%										
'01		00%			00%			00%										
Total Plants/Acre (excluding Dead & Seedlings)												'96	0	Dec:	-			
												'01	0		-			
Rosa woodsii																		
S	96	1	-	-	-	-	-	-	-	-	1	-	-	-	20			1
	01	-	-	-	-	-	-	-	-	-	-	-	-	-	0			0
Y	96	-	-	-	-	-	1	-	-	-	1	-	-	-	20			1
	01	1	-	-	-	-	-	-	-	-	1	-	-	-	20			1
M	96	-	-	-	-	-	2	-	-	-	2	-	-	-	40	10	4	2
	01	-	-	-	-	-	-	3	-	-	3	-	-	-	60	17	18	3
% Plants Showing		<u>Moderate Use</u>			<u>Heavy Use</u>			<u>Poor Vigor</u>			<u>%Change</u>							
'96		00%			100%			00%			+25%							
'01		00%			00%			00%										
Total Plants/Acre (excluding Dead & Seedlings)												'96	60	Dec:	-			
												'01	80		-			
Symphoricarpos oreophilus																		
S	96	4	-	-	-	-	-	-	-	-	4	-	-	-	80			4
	01	-	-	-	-	-	-	-	-	-	-	-	-	-	0			0
Y	96	31	-	-	24	-	-	-	-	-	55	-	-	-	1100			55
	01	12	-	-	7	-	-	13	-	-	32	-	-	-	640			32
M	96	106	14	-	62	2	-	3	-	-	187	-	-	-	3740	18	29	187
	01	82	-	-	73	-	-	9	-	-	164	-	-	-	3280	19	32	164
D	96	-	-	-	-	-	-	-	-	-	-	-	-	-	0			0
	01	3	-	-	-	-	-	-	-	-	3	-	-	-	60			3
% Plants Showing		<u>Moderate Use</u>			<u>Heavy Use</u>			<u>Poor Vigor</u>			<u>%Change</u>							
'96		07%			00%			00%			-18%							
'01		00%			00%			00%										
Total Plants/Acre (excluding Dead & Seedlings)												'96	4840	Dec:	0%			
												'01	3980		2%			

A G R E	Y R	Form Class (No. of Plants)									Vigor Class				Plants Per Acre	Average (inches) Ht. Cr.	Total
		1	2	3	4	5	6	7	8	9	1	2	3	4			
Tetradymia canescens																	
S	96	-	-	-	-	-	-	1	-	-	1	-	-	-	20		1
	01	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0
Y	96	11	-	-	3	-	-	-	-	-	14	-	-	-	280		14
	01	1	-	-	3	-	-	-	-	-	4	-	-	-	80		4
M	96	30	-	-	5	-	-	-	-	-	35	-	-	-	700	8 11	35
	01	45	-	-	-	-	-	1	-	-	46	-	-	-	920	9 10	46
D	96	3	-	-	-	-	-	-	-	-	3	-	-	-	60		3
	01	1	-	-	-	-	-	-	-	-	1	-	-	-	20		1
X	96	-	-	-	-	-	-	-	-	-	-	-	-	-	0		0
	01	-	-	-	-	-	-	-	-	-	-	-	-	-	20		1
% Plants Showing		<u>Moderate Use</u>			<u>Heavy Use</u>			<u>Poor Vigor</u>			<u>%Change</u>						
'96		00%			00%			00%			- 2%						
'01		00%			00%			00%									
Total Plants/Acre (excluding Dead & Seedlings)											'96	1040	Dec:	6%			
											'01	1020		2%			